

AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all earlier versions:

**Claim 1 (original).** A brake control system for a wheel of a vehicle in motion comprising:

- (a) a registration unit for longitudinal acceleration;
- (b) registration unit for brake pressure to wheel brake;
- (c) a computation function which continuously compare changes in acceleration and transmits signals to a pressure regulator for brake pressure; and
- (d) a pressure regulator designed to increase or reduce brake pressure to wheel brake.

**Claim 2 (original).** A method of controlling the brake pressure controller for a wheel of a vehicle in motion which changes brake pressure in accordance to change in longitudinal acceleration over time characterized by:

- (a) brake pressure to wheel brake is set off and increased evenly;
- (b) longitudinal acceleration is compared from one time frame to the next ;
- (c) when the acceleration negative value in one time frame to the next increases, brake pressure is increased;
- (d) when acceleration negative value in one time frame to the next decreases brake pressure is reduced; then;
- (e) functions "b", "c" and "d" are reiterated continuously until vehicle has come to a stop.

Claim 3 (original). The method of Claim 2, characterized by that acceleration information used is computed as a vector equal the hypotenuse in a right-angled triangle where longitudinal and lateral acceleration are right-angle sides.

Claim 4 (currently amended). System and ~~method~~ of claim 1–2 characterized by that the vehicle is an aircraft.

Claim 5 (currently amended). System and ~~method~~ of claim 1–2 characterized by being an automatic brake.

Claim 6 (currently amended). System and ~~method~~ of claim 1–2 characterized by being a manual/pedal brake.

Claim 7 (new). The method of claim 2 characterized by that the vehicle is an aircraft.

Claim 8 (new). The method of claim 2 characterized by being an automatic brake.

Claim 9 (new). The method of claim 2 characterized by being a manual/pedal brake.